identify the PBAC's main concerns relating to the methodology. **METHODS:** All PSDs published between July 2005 and November 2012 where the primary evidence was based on an indirect comparison, either as simple or a mixed treatment comparison, were reviewed. Data relating to comparator, clinical claim, economic analysis, and PBAC concerns were extracted and analysed. **RESULTS:** PSDs relating to 105 products using an indirect comparison as the primary analysis were reviewed. A total of 70 (67%) submissions were recommended; the remaining submissions were rejected (32, 30%) or deferred (3, 3%). An indirect comparison was used to support a non-inferiority claim in 84 (80%) submissions and superiority claim in 21 (20%) submissions. Of those claiming non-inferiority, 60 (71%) submissions were recommended by the PBAC. Of those claiming superiority, the PBAC accepted the clinical claim for 10 (48%) submissions; 6 (29%) received a price premium. The PBAC expressed concerns relating to the indirect comparisons in 56 (53%) PSDs. The key issues related to the exchangeability of the trials as a consequence of different patient populations (25%), quality of trials (24%), and dosing (18%). **CONCLUSIONS:** Clinical comparisons based on indirect evidence are associated with increased uncertainty related to the exchangeability of the trials. The PBAC usually accepts evidence to support a claim of non–inferiority, but rarely the same in regards to superiority.

PHP99

INVESTIGATING THE ECONOMIC IMPACTS OF NEW PUBLIC PHARMACEUTICAL POLICIES IN GREECE

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OBJECTIVES: Since 2010, cost contaiment efforts in Greece focused on the reduction of public pharmaceutical expenditure. Changes in cost sharing levels (dementia/alzheimer & epilepsy 0%-10%, osteoporosis & copd: 10-25% etc.), reductions in prices and generics substitution are some of the measures implemented after the second quarter of 2012. The aim of the study is to investigate the economic impact of the above measures for public funds and households. **METHODS:** Data on volume and values for prescribed drugs for each therapeutic category and cost sharing level were derived from EOPYY, the main reimbursement agency (95% of population). The periods compared were January to February 2012 vs. January to February 2013. **RESULTS:** During 2009-2011, public pharmaceutical expenditure in Greece declined by 23%, while for 2009-2014 the decline is projected at 61%.During 2013, 2014 targets are €2.44billion or 1.3% of GDP and 1.935 billion or 1% of GDP. In 2013, only 8.2% of prescribed drugs boxes were provided free of charge, vs 13.6% in 2012 A 25% cost sharing level was imposed to 76.4% of prescribed medicines in 2013 compared to 51.4% in 2012. Consequently, the mean cost-sharing burden for pharmaceuticals in 2013 was estimated at 18% vs 13.1% in 2012. Monthly savings in public expenditures from changes of cost–sharing patterns was estimated at €18-€20 mil. Average price per package declined in 2013 by 23%, from €18 in 2012 to €14 in 2013. Public funds savings, because of consumption of cheaper drugs, were estimated at €55-€60 mil.per month. Major savings for public funds were achieved through cardiovascular diseases drugs **CONCLUSIONS:** The economic results of the measures for third party payers are positive. However, the measures should be reconsidered and examined more closely also taking in mind social effects, in terms of accessibility of users and especially for vulnerable groups who in need of essential pharmaceutical care.

PHP100

CHRONIC PATIENTS RESPONSE TO THE IMPLEMENTATION OF INTERNATIONAL NON-PROPRIETARY NAME (INN) PRESCRIBING IN GREECE

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OBJECTIVES: Under the pressure of fiscal consolidation and pharmaceutical spending decrease in Greece, mandatory generic substitution and compulsory prescription by international non-proprietary name (INN)were recently introduced as reimbursement drivers in Greece. This study aims to investigate the implications of INN implementation regarding chronic patients' choices and their willingness to switch to an alternative pharmaceutical treatment. **METHODS:** A cross-sectional study was carried out among 1600 patients from four chronic disease groups(HTN, Diabetes,COPD and Alzheimer). Logistic regression analysis was used to investigate the factors associated with chronic patients' choices. **RESULTS:** Out of 1600 patients approached, 1594responded to the survey(99.6%). 69% of them stated that they were aware of the new reimbursement system. After the implementation of INN prescribing, only few(11%) have changed their usual drug. 43% were totally certain that an original drug is more effective than a generic, while 67% have never used generics in the past. Most patients(82%) preferred to be prescribed their usual medicine, despite of the extra cost they had to bear. This choice was a co-decision with their physician as 58% of them stated. The average additional amount that they would be willing to spend in order not to switch to another medicine was estimated at €17.8. These results showed a significant statistical correlation with patients' income, educational level and occupation category. **CONCLUSIONS:** According to this study chronic patients are not willing to change their usual drug and switch to a generic, despite the cost this choice imposes. Consequently INN prescribing may decrease public expenditures on pharmaceuticals but it will lead to higher private expenditure. Given that due to economic crisis incomes are continuously decreasing and unemployment rate is rising, the measure might eventually result in lower adherence to medication and consequently in adverse effects on patients health status and future public expenditure for treating possible complications.

PHP101

MARKET ACCESS RISK SCORING: A UNIFIED FRAMEWORK FOR CROSS COUNTRY COMPARISON OF DIVERSE MARKET ACCESS SYSTEMS AND PROCESSES

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OBJECTIVES: To define and develop risk - and more specifically market access risk– as a framework towards understanding and evaluating stability in market access systems at an individual country level. **METHODS:** We created a combination model of rating quantitative and qualitative variables which affect a country's ability and willingness to pay for new drugs. The criterion for selection of variables is based on relevance, availability and uniformity in our model. We included a total of 42 variables categorised under three verticals - quantitative, qualitative and measures of stability. In order to derive a non-recursive model of ratings, we fit the regression equation for quantitative and qualitative variables as: $Y(1) = \alpha_i + \Sigma\beta_i{}^*X_i + \varepsilon$ (Equation 1.1) $Y(2) = \alpha_j + \Sigma\beta_j{}^*X_j + \varepsilon$ (Equation 1.2) where Y(1) and Y(2) are the market access risk ratings for quantitative and qualitative variables, X_i and X_j are vectors of independent quantitative and qualitative variables, and ε is the error term. The final score was derived by taking the geometric mean of the two ratings together with ratings for the measures of stability and is described as below: Total Risk Score = $\sqrt{Y(1)\text{^}2^*}$ Weight of Y(1) + Y(2)^2*Weight of Y(2) + Risk Rating (Measures of Stability)^2*Weight of (Measures of Stability). **RESULTS:** We decided to aggregate risk scores from different countries into defined clusters – such as BRICS (Brazil, Russia, India, China and South Africa), BRICS-MT (Brazil, Russia, India, China, South Africa, Mexico and Turkey), and Emerging Europe (Czech Republic, Hungary and Poland) - for easier comparison. Their respective risk scores were 4.17, 4.96 and 3.30. **CONCLUSIONS:** Market Access Risk ratings could serve as a starting point for crafting tailored strategies to fully capitalise new opportunities. These ratings could also serve as a benchmark for a country to improve its overall access to pharmaceutical products and improve quality of care.

PHP103

CAN VARIATION IN HOSPITAL PROCEDURE RATES IDENTIFY CANDIDATES FOR HEALTH TECHNOLOGY REASSESSMENT AND DISINVESTMENT?

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OBJECTIVES: The process of disinvestment from inefficient health care involves identification and prioritisation of candidates, a health technology reassessment (HTR)of evidence, implementation and monitoring of discontinuance. We evaluate whether variation in procedure rates is a useful tool for identifying potential candidates for HTR and disinvestment. **METHODS:** We used English Hospital Episode Statistics (HES) data to identify inpatient procedures. We selected the 181 most frequent interventional procedures for analysis. For each procedure we used Poisson regression to estimate the variance in procedure rates, adjusting for age, gender and other proxies of clinical need, between Primary Care Trusts in England. We conducted multivariate regression analyses to examine factors that might be associated with high variation in procedure rates (e.g. coding uncertainty, evolving evidence). **RESULTS:** The degree of inter-PCT variation in procedure rates differed vastly from procedure to procedure. Among the five procedures with the highest inter-PCT variance, the procedure rate was more than thirty times higher in the PCT at the ninetieth percentile than the PCT at the tenth percentile. The multivariable analysis provided strong evidence that large increases in procedure use, large decreases in procedure use, the presence of a substitute procedure, and shorter length of stay were all associated with higher inter-PCT variation in procedure rates. **CONCLUSIONS:** The widespread geographic variation in hospital procedure rates in England are not solely due to variance in clinical need and are likely to reflect clinical uncertainty about appropriate procedure use which might be reduced by HTR. The relevant HTR questions often concern the appropriate procedure setting and patient subgroups or the relative value of two alternative procedures rather than the value of a single procedure per se. In some circumstances knowledge of geographic variation might lead to NHS savings and disinvestment or discontinuation of inefficiently used procedures.

PHP104

INFERENCE ON INCREMENTAL COST EFFECTIVENESS THRESHOLDS INFLUENCING NICE DECISIONS: A BAYESIAN ANALYSIS

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OBJECTIVES: NICE has been issuing health technology guidance based on cost-effectiveness evidence alongside other factors since 2000. Previous studies have shown that technologies with higher incremental cost-effectiveness ratio (ICER) were more likely to be rejected; however none drew direct inference on the ICER threshold(s). Our aim is to directly estimate the ICER threshold(s) as well as the possible range. **METHODS:** Data were abstracted from the technology appraisals (TA) published from 03/2000 to 12/2012. For each decision to 'recommend' or 'reject' a technology we collected: ICER, publish date, disease area, technology type, comparator, reason for rejection if rejected, population and end of life (EOL) criteria (applies only to TAs after January 2009). Cancer related technologies which had been evaluated for EOL criteria were classified as satisfying or not satisfying the criteria. A Bayesian hierarchical model was implemented to estimate the overall threshold as well as the thresholds in different technology categories. **RESULTS:** A total of 270 TA's were evaluated. After excluding those updated or terminated, a total of 187 appraisals with 323 decisions entered the final analysis. Non-informative priors were given to all the model parameters. The unadjusted estimate of the ICER threshold was £46,850 (95% CI: £40,420-£55,570). After adjusting for disease area, cancer related technologies had an estimated threshold of £48,550, (95% CI: £36,550-£63,200) compared to non-cancer related technologies' estimated threshold of £43,430, (95% CI: £35,440-£52,300). Among the 37 technologies evaluated for end of life criteria, the estimated ICER threshold was £56,160, (95% CI: £39,020-£79,970) and £33,100, (95% CI: £19,180-£49,620) for those satisfying and not satisfying the criteria respectively. **CONCLUSIONS:** Preliminary assessment of NICE appraisals and associated ICER indicates that a likely ICER threshold exceeds the £20K-£30K quoted in the NICE Methods Guide. Additional analyses are needed to assess the impact of other factors on the likely variability of ICER thresholds.